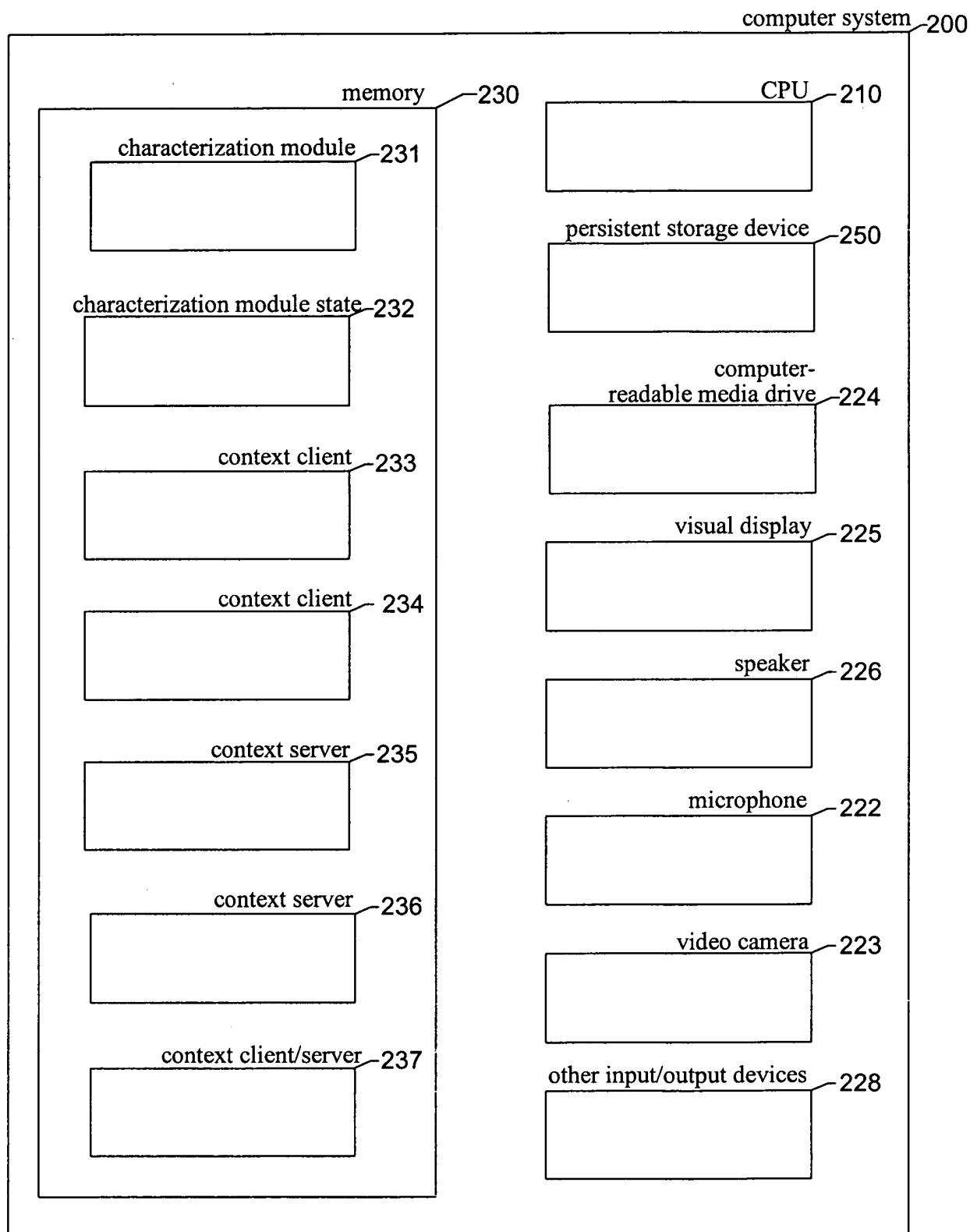
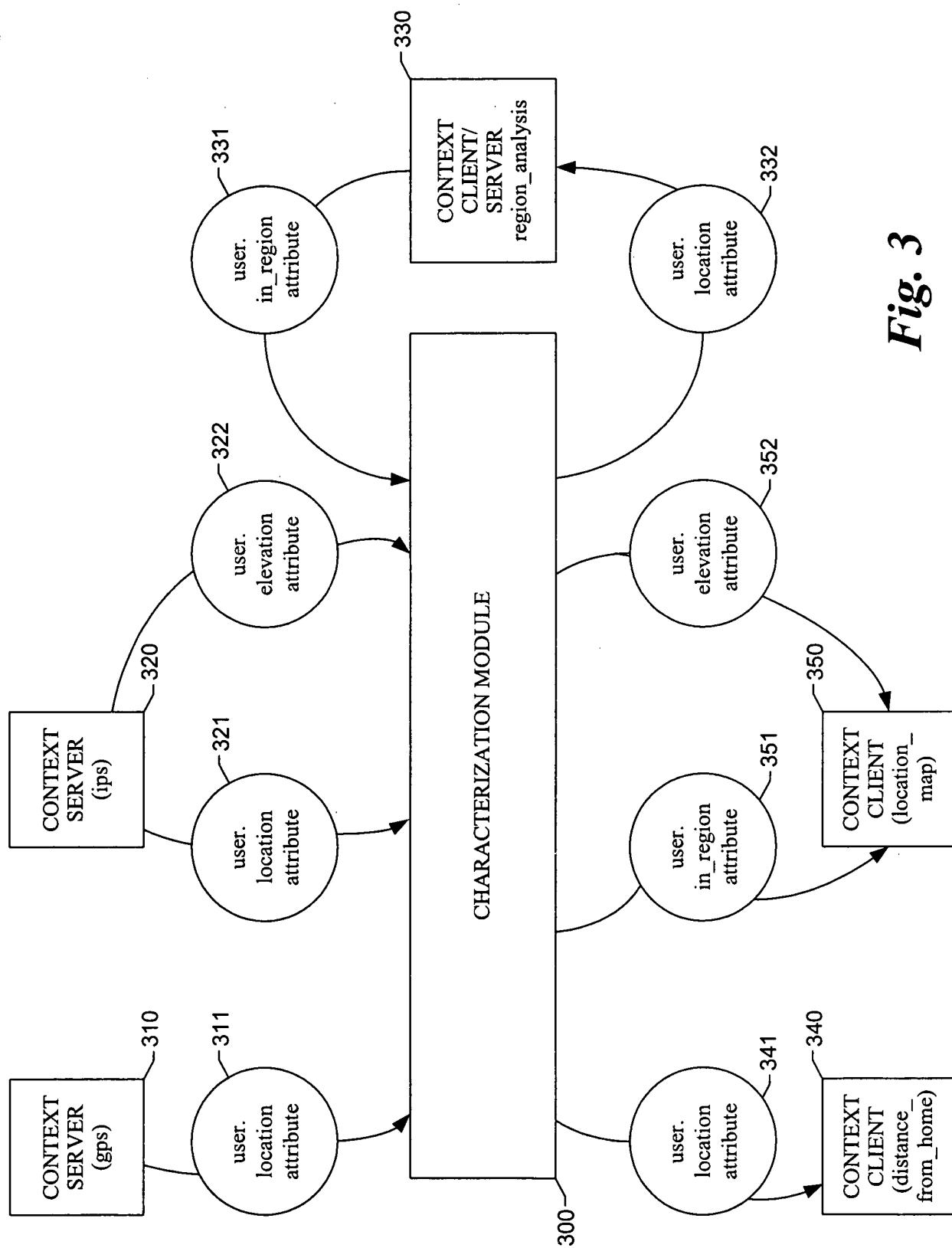
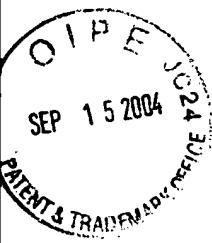
**Fig. 1**



*Fig. 2*

**Fig. 3**



context server table				400
context server name	version	installation date	filename	request handler
gps	1	2/10/2000	gps.exe	(reference)
ips	1	2/21/2000	ips.exe	(reference)
location_region_analysis	1	2/10/2000	l_r_a.exe	(reference)

**Fig. 4**

attribute instance table				500
attribute name	context server name	value	uncertainty	timestamp
user.location	gps	47° 38.73' N, 122° 18.43' W	0° .09'	13:11:04.023 2/22/2000
user.location	ips	47° 38.745' N, 122° 18.424' W	0° .021'	13:11:01.118 2/22/2000
user.elevation	ips	22	.5	13:11:01.118 2/22/2000
user.in_region	location_region_analysis	none	none	meters
user.in_region	511	512	513	514
				515
				516
				517

**Fig. 5**

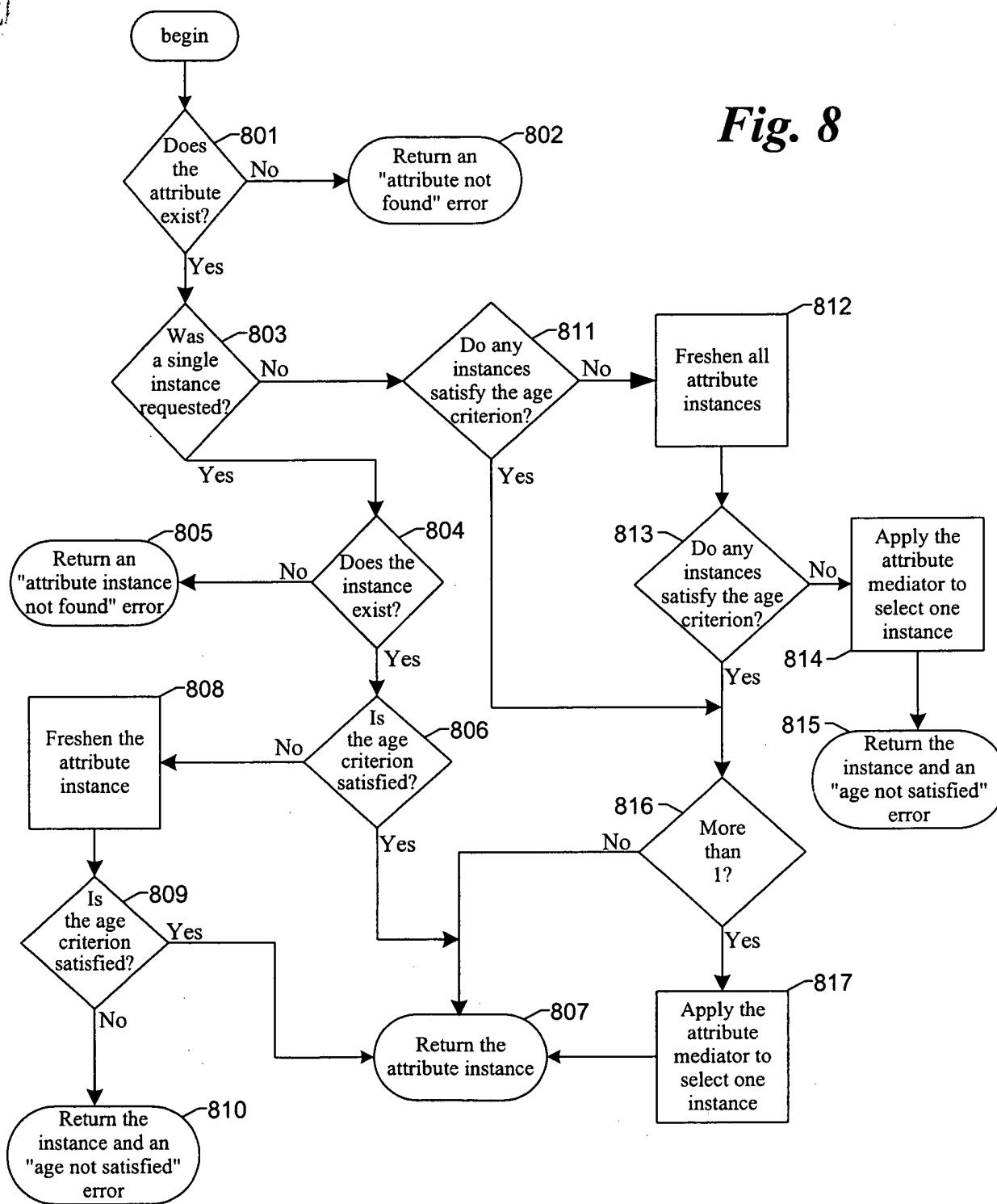


600	context client name	message handler	context client table
601	location_map	(reference)	
602	distance_from_home	(reference)	
603	region_analysis	(reference)	
			612
611			

**Fig. 6**

attribute name	context server name	value	uncertainty	timestamp	units	number of context clients consuming
user.location	gps	47° 38.73' N, 122° 18.43' W	0° .09'	13:11:04.023 2/22/2000	degrees/minutes	2
user.location	ips	47° 38.745' N, 122° 18.424' W	0° .021'	13:11:01.118 2/22/2000	degrees/minutes	2
user.elevation	ips	22	.5	13:11:01.118 2/22/2000	meters	1
user.in_region	location_region_analysis	none	none	none	none	1
701						
702						
703						
704						
711	712	713	714	715	716	717

**Fig. 7**



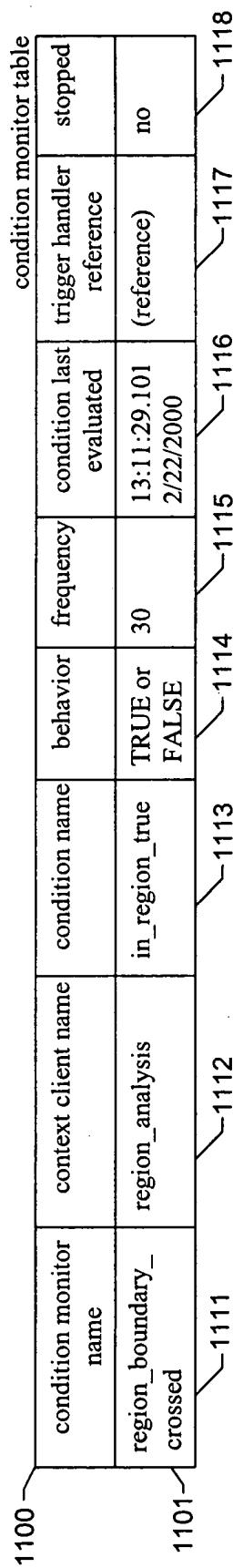
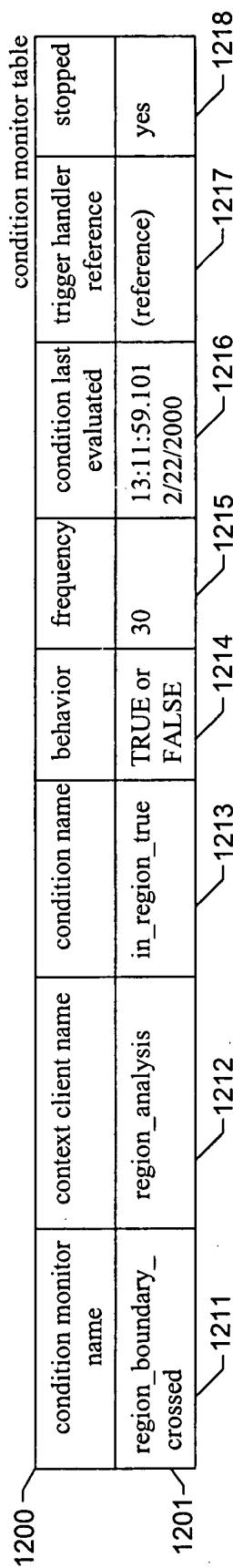


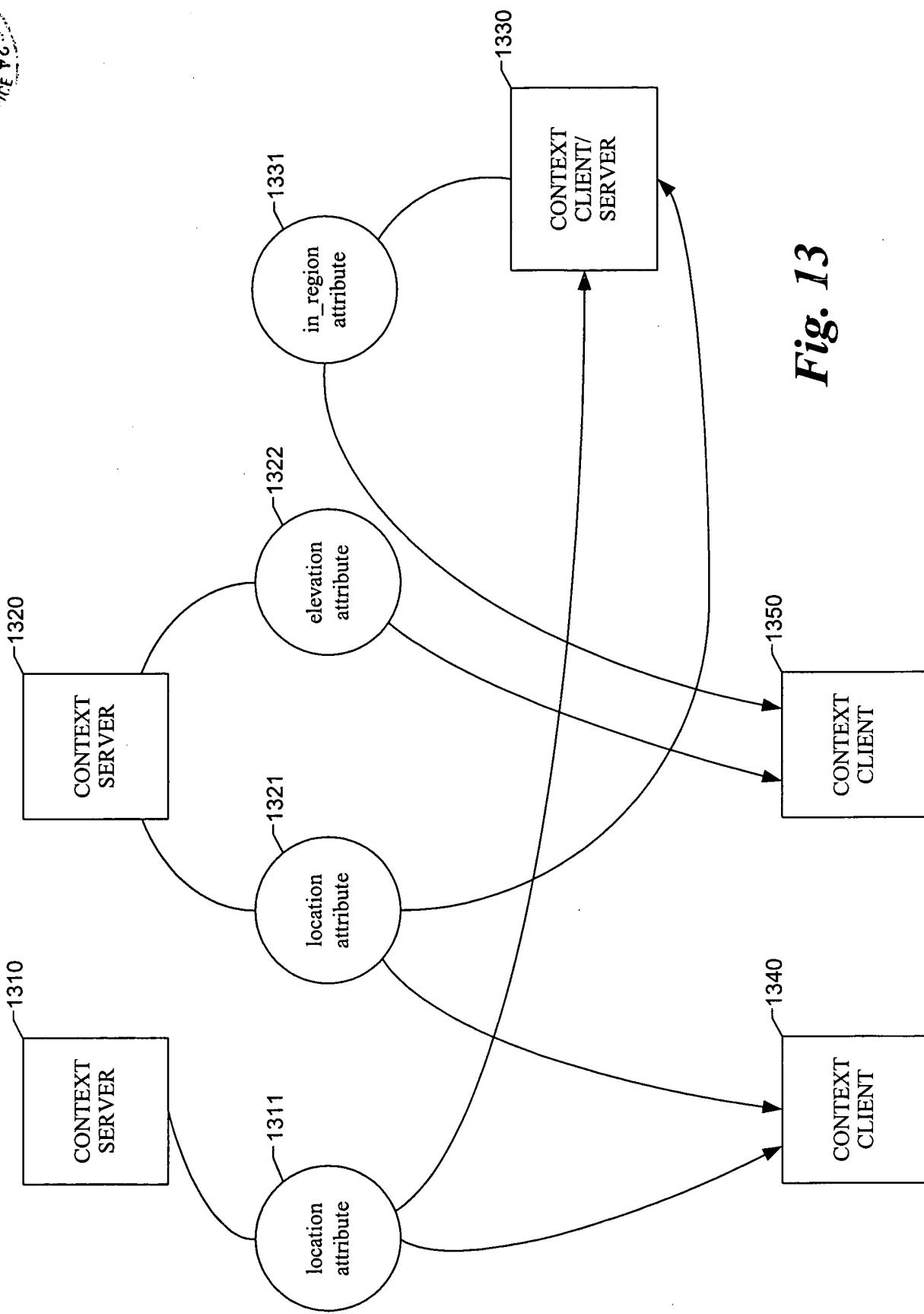
attribute instance table							
	attribute name	context server name	value	uncertainty	timestamp	units	number of context clients consuming
901	user.location	gps	47° 38.73' N, 122° 18.43' W	0° .09'	13:11:04.023 2/22/2000	degrees/minutes	2
902	user.location	ips	47° 38.745' N, 122° 18.424' W	0° .021'	13:11:01.118 2/22/2000	degrees/minutes	2
903	user.elevation	ips	22.25	.5	13:11:06.565 2/22/2000	meters	1
904	user.in_region	region_analysis	none	none	none	none	1

**Fig. 9**

condition table						
	condition name	context client name	first logical parameter	second logical parameter	comparison value	logical operator
1001	in_region_true	region_analysis	user.in_region	none	TRUE	=
					1014	1015
					1016	1016

**Fig. 10**

*Fig. 11**Fig. 12*

**Fig. 13**

Serial No. 09/724,777 Docket No. 890057.419C1

Inventor(s): Kenneth H. Abbott et al.

Express Mail No. EV447226175US "REPLACEMENT SHEET"



attribute request table		
	attribute name	context client name
1401	user.location	distance_from_home
1402	user.in_region	location_map
1403	user.location [gps]	location_region_analysis
1404	user.elevation	location_map

1411                          1412

***Fig. 14***



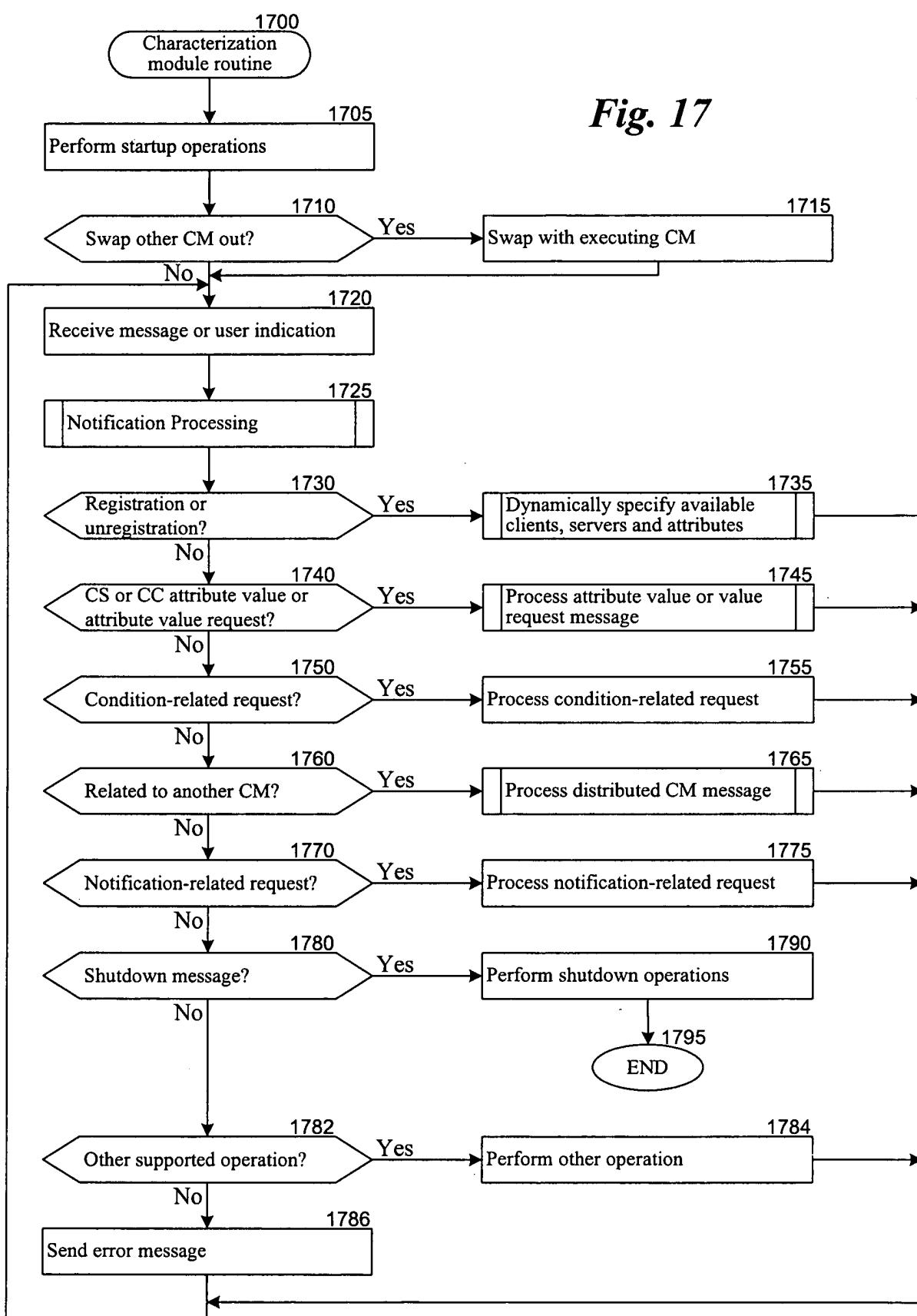
User.	Desired_privacy_level Interruptibility Speed Direction Acceleration Availability. Cognitive_availability Tactile_availability Manual_availability Visual_availability Oral_availability Auditory_availability Proximity.<Item or place name> Mood. Happiness Sadness Anger Frustration Confusion Activity. Driving Eating Running Sleeping Talking Typing Walking Location. Place_name Latitude Longitude Altitude Room Floor Building Address Street City County State Country Postal_Code Destination. (same as User.Location.) Physiology. Pulse Body_temperature Blood_pressure Respiration Person.<name or ID>. (same as User.) Platform.	Platform. (continued) CPU. Load Speed Memory. Total_capacity Used Storage. Total_capacity Used Connectivity. Connection_status Connection_speed Connection_type/device Connection_activity Power. Power_source Power_level Environment. People. Nearest Number_present Number_close Local. Time Date Temperature Pressure Wind_speed Wind_direction Absolute_humidity High_forecast_temperature Low_forecast_temperature People_present Ambient_noise_level Ambient_light_level Days.<previous or future>. High_temperature Low_temperature Precipitation_type Precipitation_amount Place.<place name>. (same as Environment.Local) Application. Mail. Available New_messages_waiting Messages_waiting_to_be_sent Phone. Available In_use On/off Notification_mechanism Call_incoming Caller_ID Sound_recorder. Available Recording
UI.	Oral_input_device_availability Manual_input_device_availability Tactile_output_device_availability Visual_output_device_availability Auditory_output_device_availability	

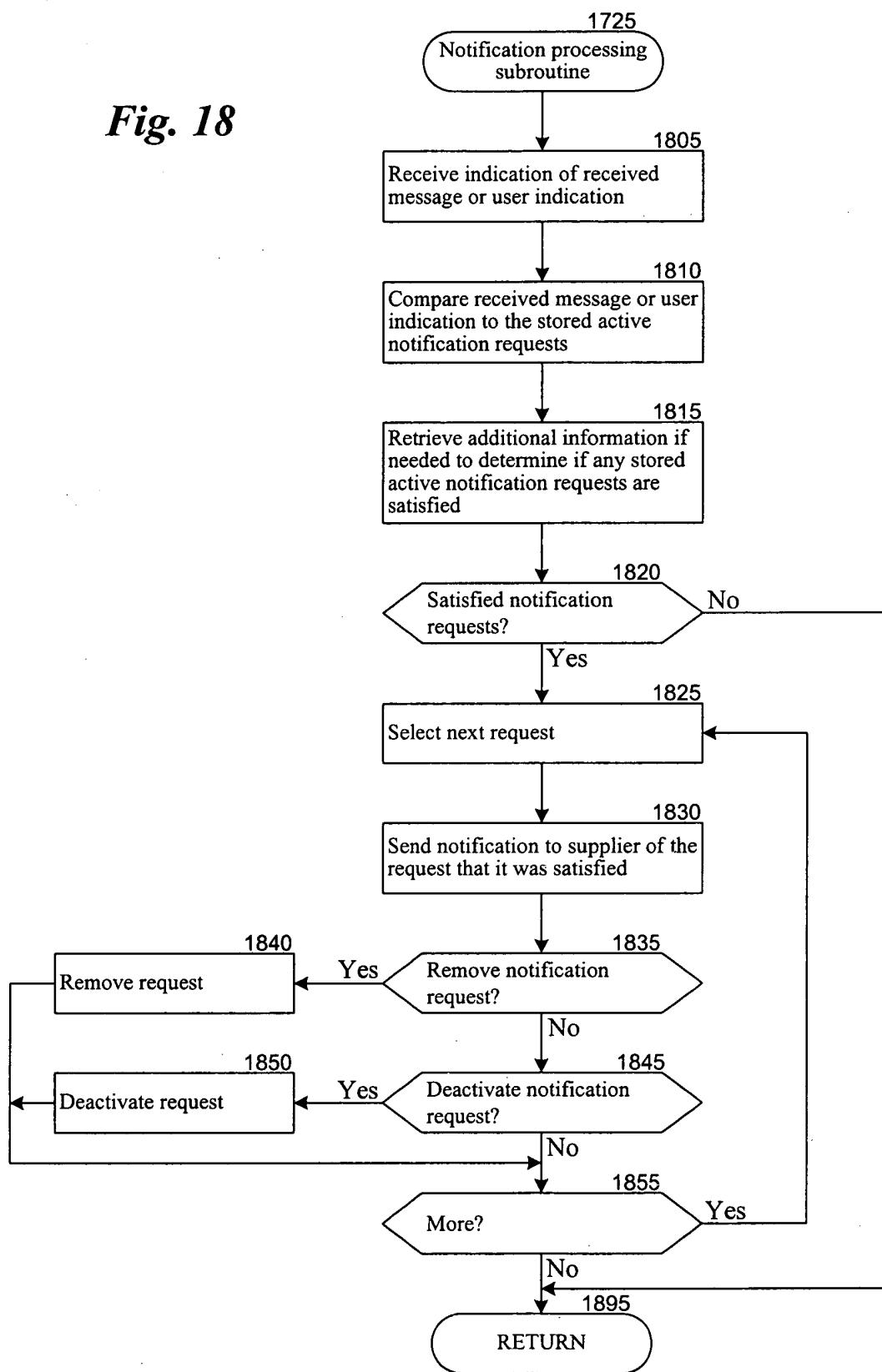
**Fig. 15**



**Fig. 16**

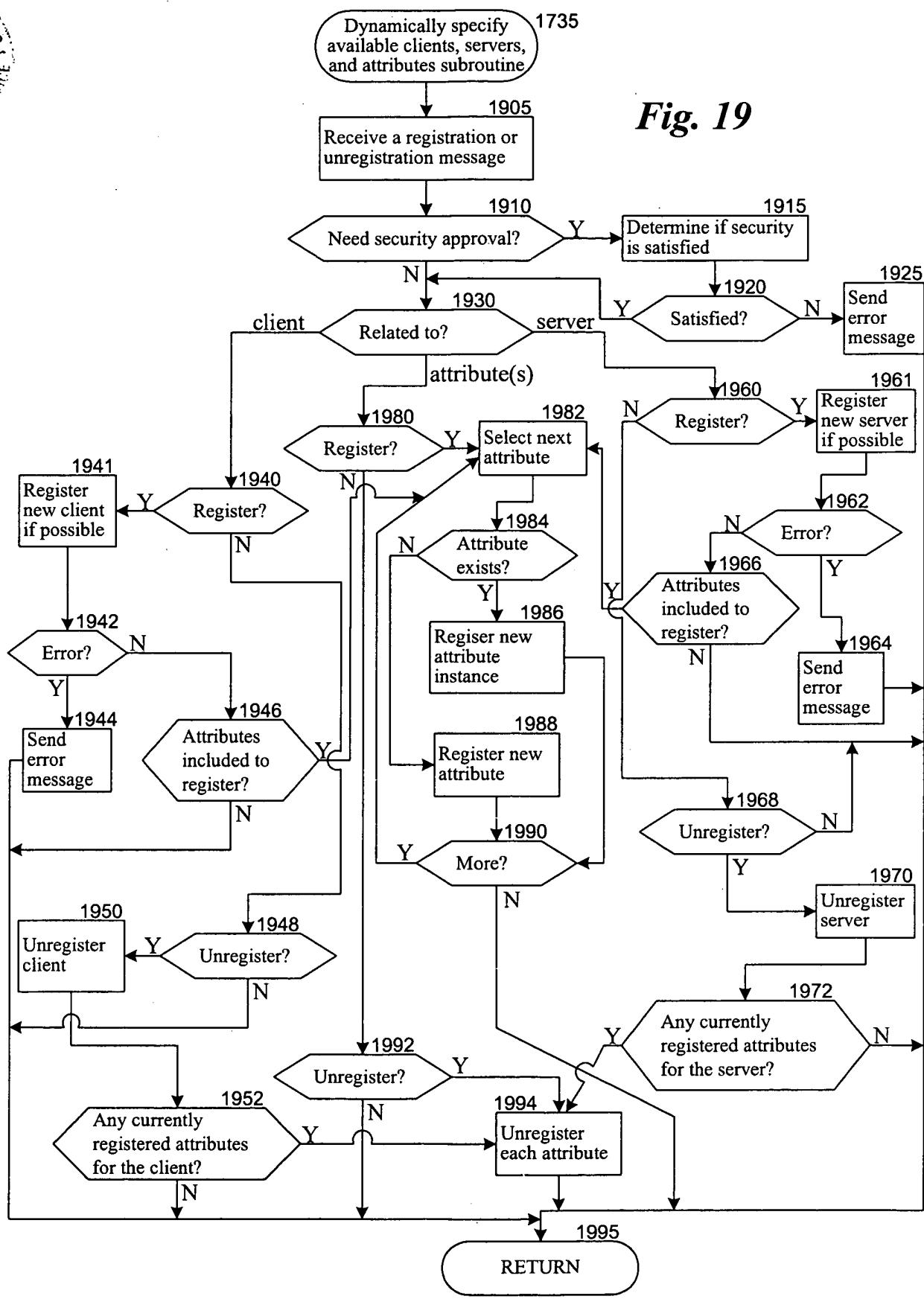
<p>1) User Setting</p> <ul style="list-style-type: none"> <li>a) Mental Context           <ul style="list-style-type: none"> <li>i) Meaning</li> <li>ii) Cognition               <ul style="list-style-type: none"> <li>(1) Divided User Attention</li> <li>(2) Task Switching</li> <li>(3) Background Awareness</li> </ul> </li> <li>iii) Solitude</li> <li>iv) Privacy               <ul style="list-style-type: none"> <li>(1) Desired Privacy</li> <li>(2) Perceived Privacy</li> </ul> </li> <li>v) Social Context</li> <li>vi) Affect</li> </ul> </li> <li>b) Physical Situation           <ul style="list-style-type: none"> <li>i) Body               <ul style="list-style-type: none"> <li>(1) Biometrics</li> <li>(2) Posture</li> <li>(3) Motion</li> <li>(4) Physical Encumberment                   <ul style="list-style-type: none"> <li>(a) Senses                       <ul style="list-style-type: none"> <li>(i) Eyes</li> <li>(ii) Ears</li> <li>(iii) Tactile</li> <li>(iv) Hands</li> <li>(v) Nose</li> <li>(vi) Tongue</li> </ul> </li> <li>(b) Workload demands/effects</li> <li>(c) Interaction with computer devices</li> <li>(d) Interaction with people</li> <li>(e) Physical Health</li> </ul> </li> <li>ii) Environment               <ul style="list-style-type: none"> <li>(1) Time/Space</li> <li>(2) Objects</li> <li>(3) Persons                   <ul style="list-style-type: none"> <li>(a) Audience/Privacy Availability                       <ul style="list-style-type: none"> <li>(i) Scope of Disclosure</li> <li>(ii) Hardware affinity for privacy</li> <li>(iii) Privacy Indicator for User</li> <li>(iv) Privacy Indicator for Public</li> <li>(v) Watching Indicator</li> <li>(vi) Being Observed Indicator</li> </ul> </li> </ul> </li> <li>(4) Ambient Interference               <ul style="list-style-type: none"> <li>(a) Visual</li> <li>(b) Audio</li> <li>(c) Tactile</li> </ul> </li> </ul> </li> </ul> </li></ul></li></ul>	<p>2) Computer</p> <ul style="list-style-type: none"> <li>a) Power</li> <li>b) Configuration           <ul style="list-style-type: none"> <li>i) User Input Systems               <ul style="list-style-type: none"> <li>(1) Hand/Haptic                   <ul style="list-style-type: none"> <li>(a) Keyboard/Keystrokes</li> </ul> </li> <li>(2) Voice/Audio</li> <li>(3) Eye Tracking</li> <li>(4) Cursors                   <ul style="list-style-type: none"> <li>(a) Axis</li> <li>(b) Resolution                       <ul style="list-style-type: none"> <li>(i) Selection</li> <li>(ii) Invocation</li> </ul> </li> </ul> </li> <li>(c) Accelerators</li> </ul> </li> <li>ii) Output Systems           <ul style="list-style-type: none"> <li>(1) Visual               <ul style="list-style-type: none"> <li>(a) Resolution</li> </ul> </li> <li>(2) Audio               <ul style="list-style-type: none"> <li>(a) Public/Private</li> </ul> </li> <li>(3) Haptic</li> </ul> </li> <li>iii) External Resources           <ul style="list-style-type: none"> <li>(1) I/O devices</li> <li>(2) Connectivity</li> </ul> </li> <li>c) Data           <ul style="list-style-type: none"> <li>i) Quantity/State</li> <li>ii) Urgency/Importance               <ul style="list-style-type: none"> <li>(1) Use of Prominence</li> </ul> </li> <li>iii) Modality</li> <li>iv) Sensitivity/Purpose               <ul style="list-style-type: none"> <li>(1) Privacy Issues</li> <li>(2) Use of Association</li> <li>(3) Use of Safety</li> </ul> </li> <li>v) Source/Ownership               <ul style="list-style-type: none"> <li>(1) Types                   <ul style="list-style-type: none"> <li>(a) User generated</li> <li>(b) Other computers or people</li> <li>(c) Sensor</li> <li>(d) PC State</li> </ul> </li> <li>(2) Use of Association</li> </ul> </li> </ul> </li></ul></li></ul>
--	---

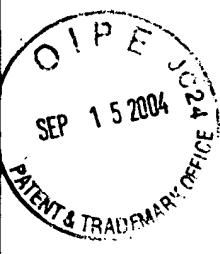
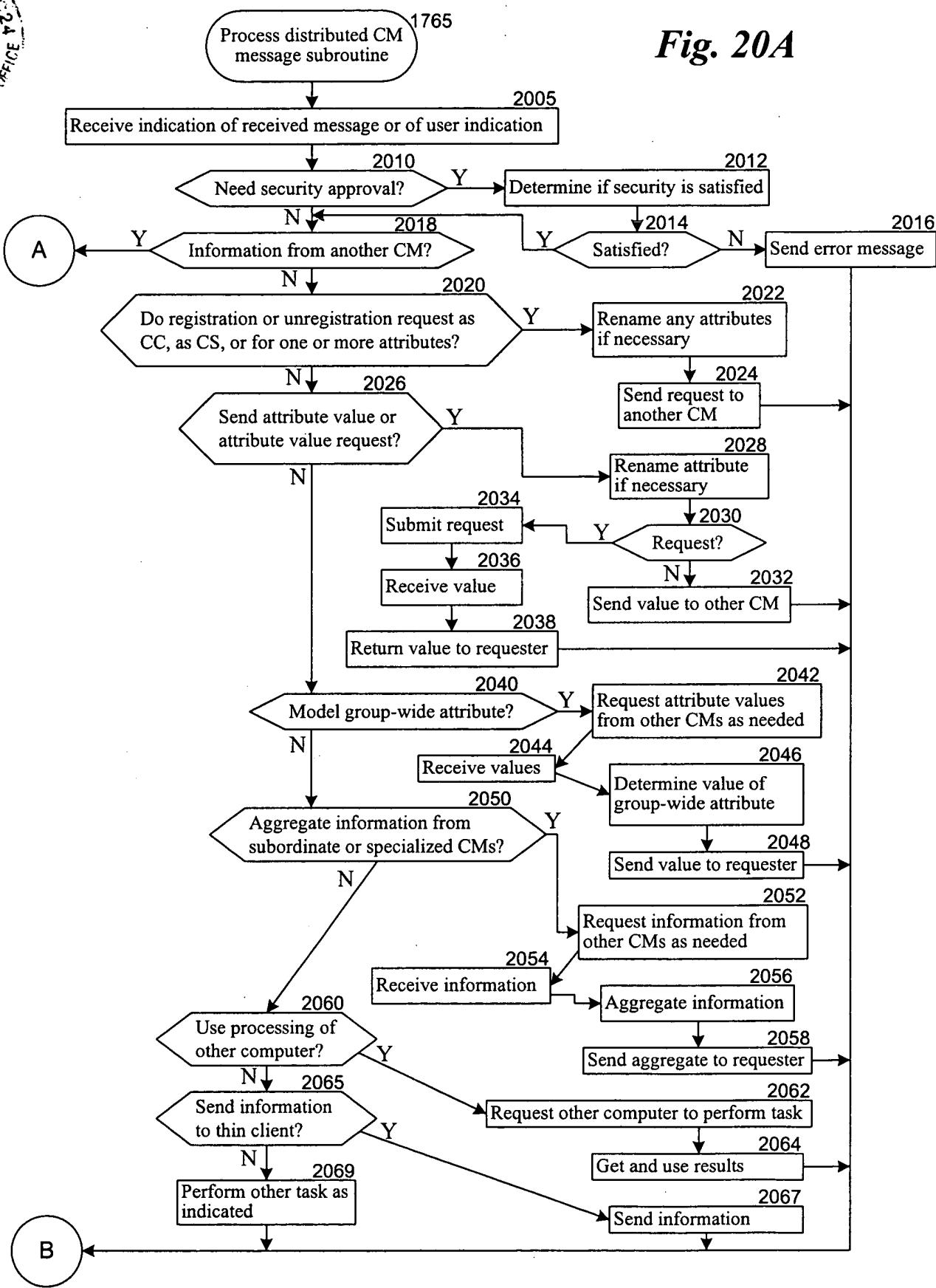
**Fig. 17**

**Fig. 18**



*Fig. 19*



**Fig. 20A**

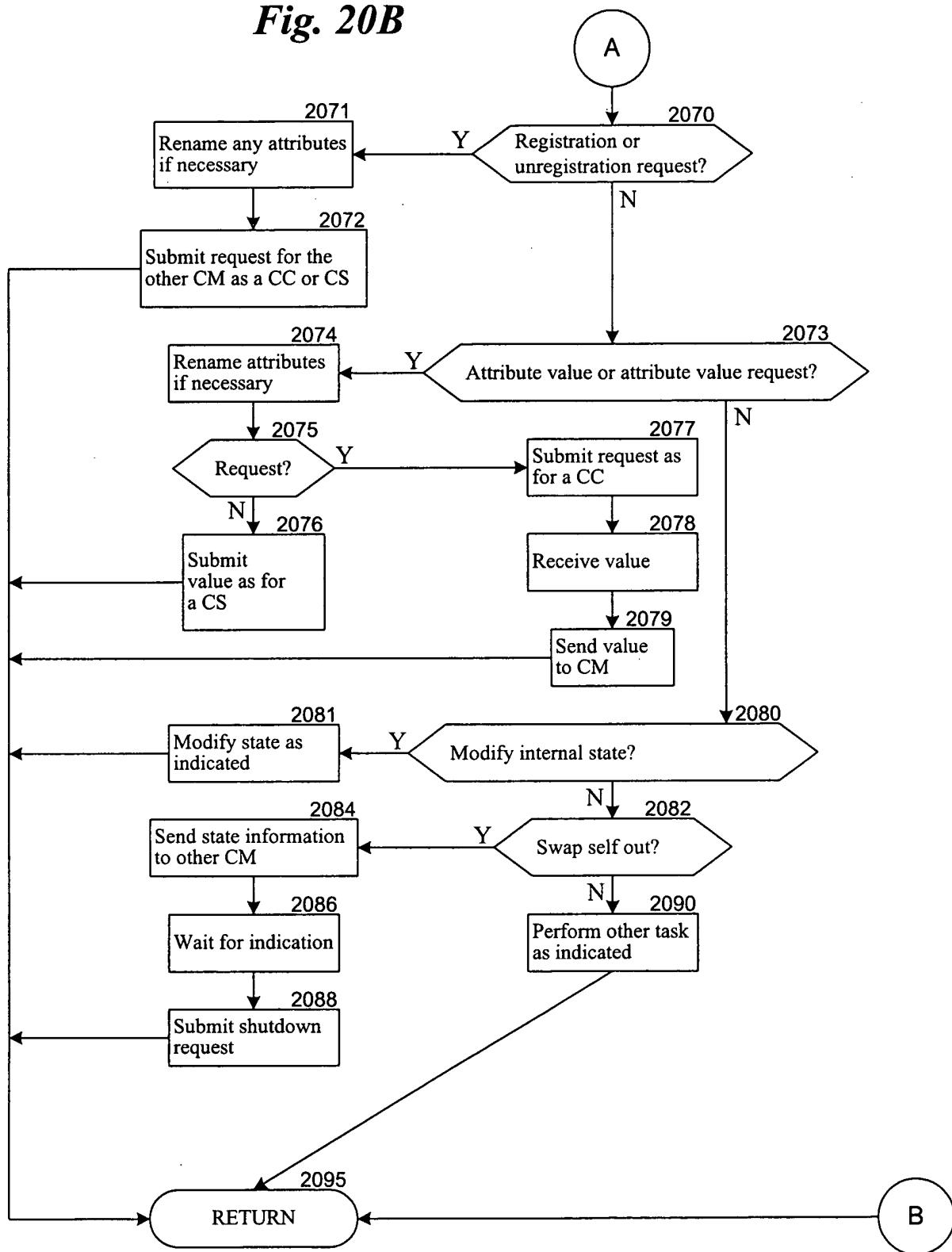
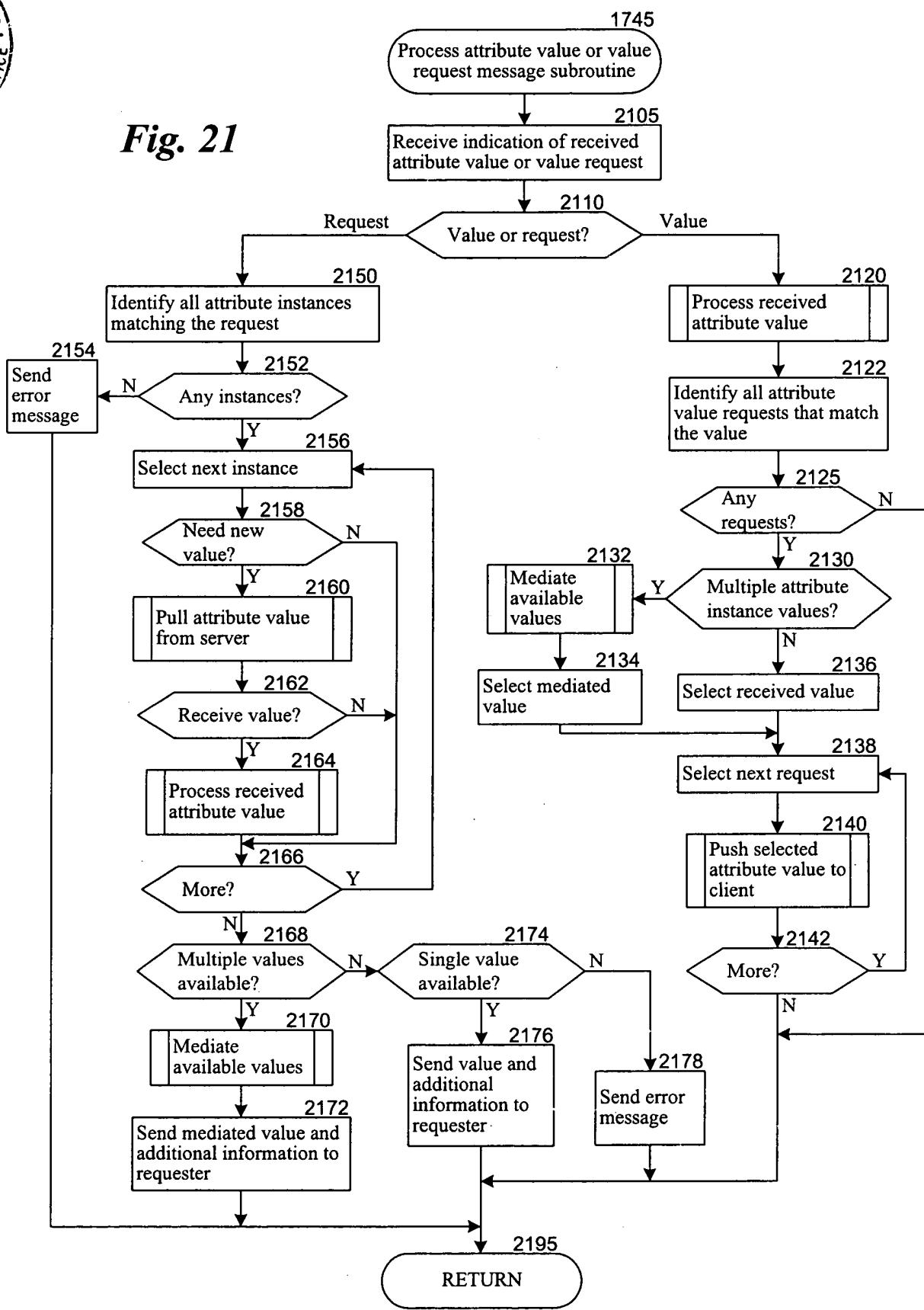
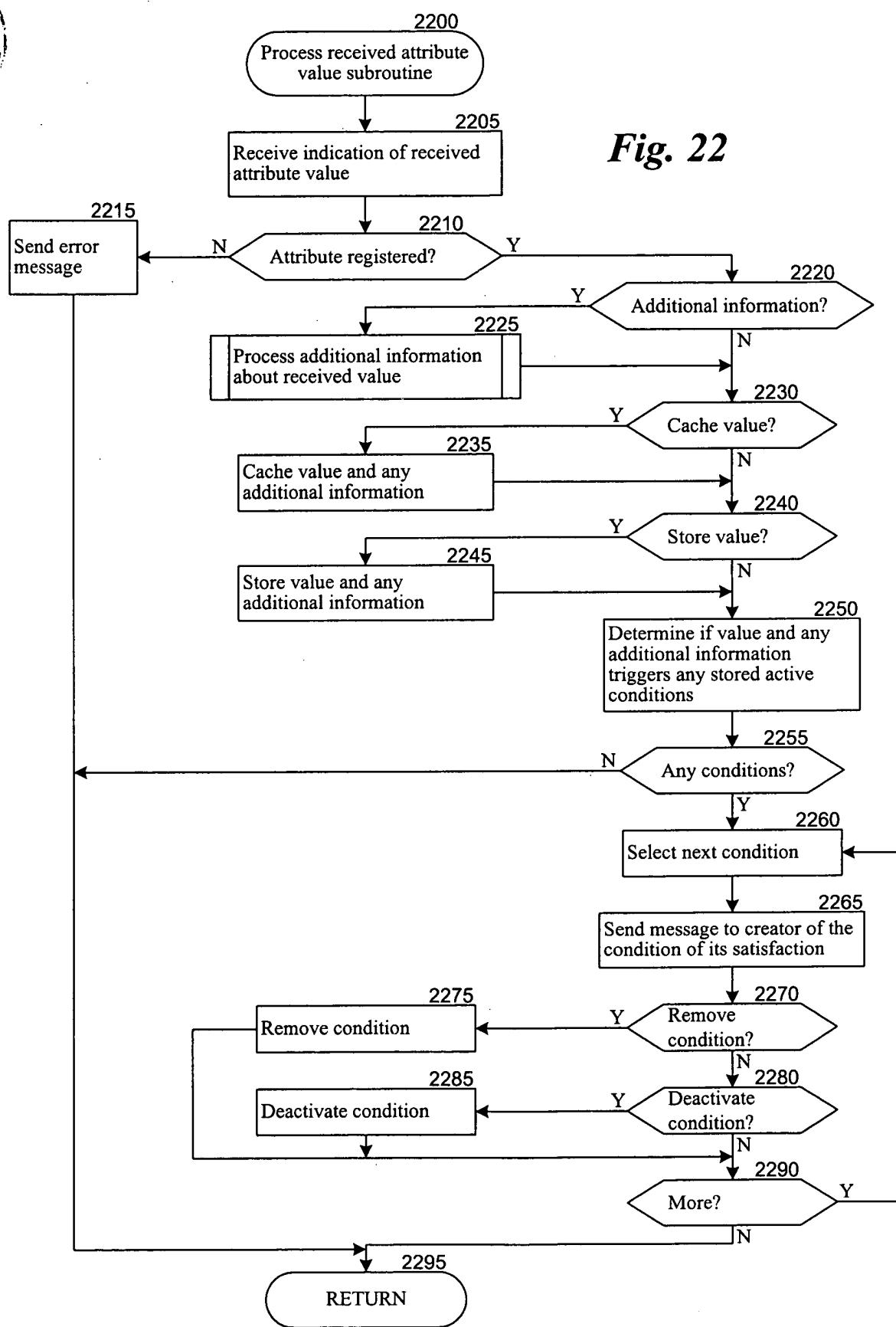
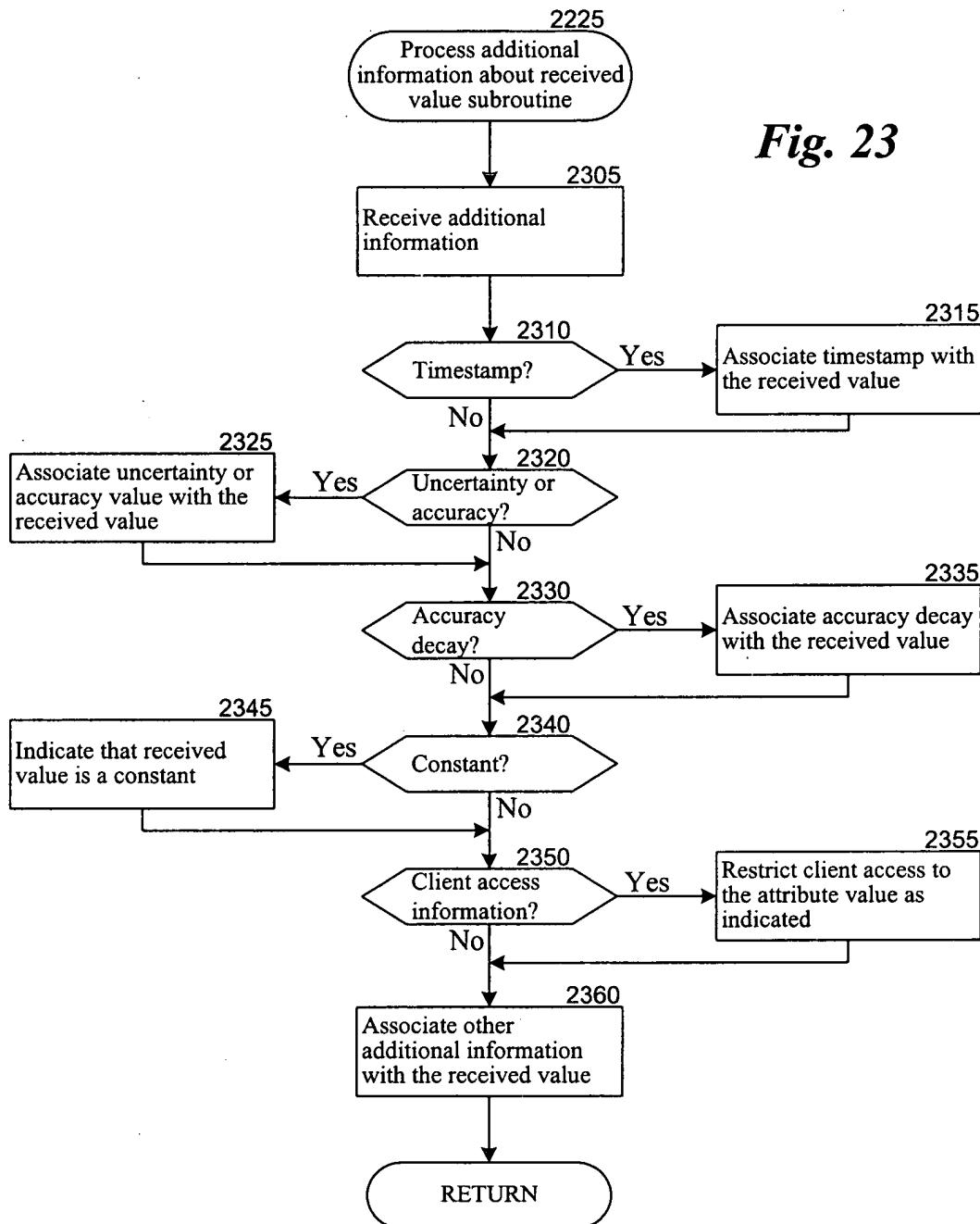
**Fig. 20B**

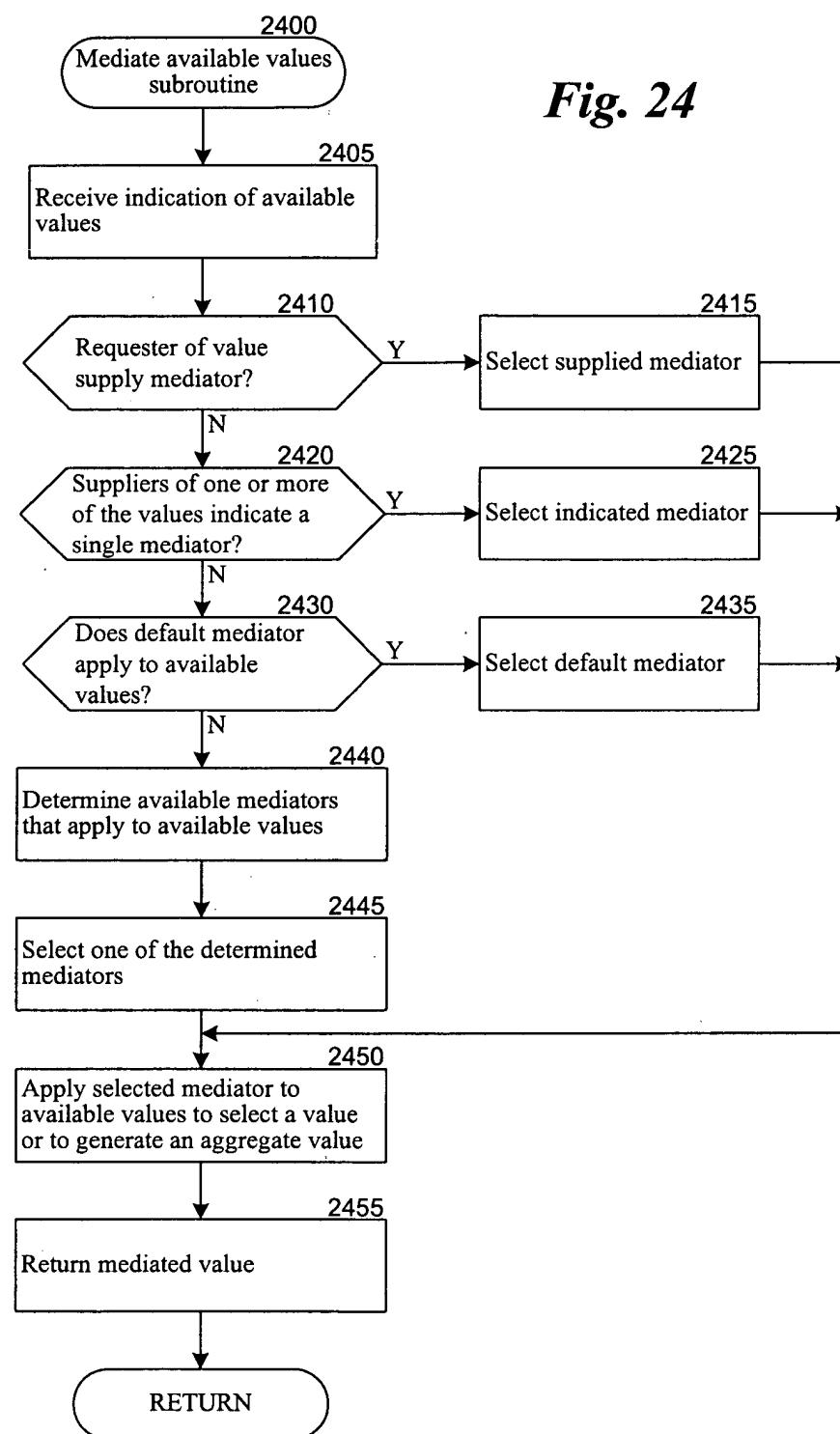


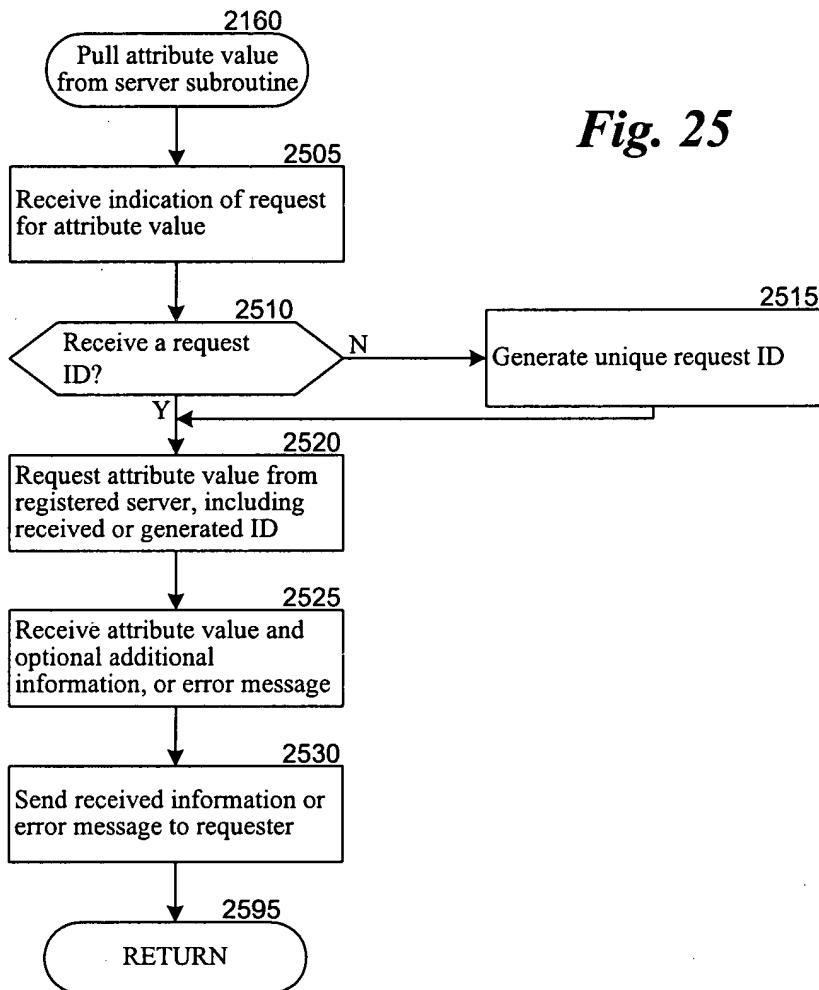
Fig. 21







**Fig. 24**



*Fig. 25*

